

Cross Connection Alert for Annual Backflow Assembly Testing

A connection between your drinking water pipes and a source of contamination is called a cross connection. Examples include irrigation systems; dialysis machines; nearly every hose-end applicator used for fertilizers, pesticides and herbicides; photo development equipment; and industrial waste uses.

Cross connections are extremely dangerous because they provide opportunities for contaminating fluids to be pulled back into the water system. To help minimize the dangers, please use the following tips:

- Avoid using hose-end spray applicators for landscape chemicals.
- Install a backflow assembly if there is an existing or potential cross-connection.
- Have the backflow assembly tested by a state-certified backflow tester after installation and send a copy to the City of Duvall, Public Works Department, PO Box 1300, Duvall, WA 98019.
- Every year, all Duvall water utility customers who have backflow assemblies must have them tested and send a copy of certification to the Public Works Department.

Please call Mike Fisher at 425.788.3434 or mike.fisher@duvallwa.gov if you have questions about cross connections or testing.

Community Participation

You are invited to participate in our public City Council meetings and voice any concerns you have about your drinking water. The City Council meets the 2nd and 4th Thursdays of each month at 7:00 p.m. in the meeting room at the Duvall Fire Station, 15600 - 1st Avenue, Duvall.

Information For Your Review

The City has on file for customer review our March 2013 Water Comprehensive Plan, water quality test results, a Cross-Connection Control Plan, Development Design Standards, and the Water Shortage Response Plan.



City of Duvall
Public Works Dept.
14525 Main Street NE
PO Box 1300
Duvall, WA 98019



2012 ANNUAL WATER QUALITY REPORT

City of Duvall Contacts:

Public Works: 425.788.3434
Utility Billing: 425.788.1185

www.duvallwa.gov

Rate Assistance Program

For those of our customers who are struggling with financial hardship, we're committed to providing rate assistance. For more information about the program contact the Utility Billing Clerk.

Duvall provides great tasting, safe water to your tap at less than a penny a gallon. Your water rates pay for maintaining our water system, from protecting, storing, treating and delivering water, to customer service, security, tax and administration.

Where your rate Dollar goes

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This report includes details about where your water comes from, its composition and how it meets Environmental Protection Agency and Washington State Department of Health standards. We encourage you to become informed about your drinking water to help us safeguard quality water supplies now and for future generations. This report is sent to you as required by the Federal Safe Drinking Water Act.

Safe Reliable Drinking Water

We are pleased to provide you with the City of Duvall's Annual Water Quality Report, which is prepared for you each year by the City's Public Works Department.

Delivering quality water to you is our top priority. This report includes details about where your water comes from, its composition and how it meets Environmental Protection Agency and Washington State Department of Health standards. We encourage you to become informed about your drinking water to help us safeguard quality water supplies now and for future generations. This report is sent to you as required by the Federal Safe Drinking Water Act.



Smart Watering

Watering too much causes many common plant problems. You can grow healthier, deeper-rooted plants, save money on water bills and conserve precious water by learning to give your lawn and garden just what they need and no more.

Some easy ways to lower water bills and get more water to plants include:

- Mix compost into your soil, and spread mulch on top of soil to hold more water and prevent evaporation.

Choose low water use plants. Once established they can often thrive just on rainfall.

Use soaker hoses or drip irrigation on beds – they save 50% or more compared with sprinklers!

Use a timer that screws onto the faucet (available at garden stores) to water just the right amount.

Water lawns separately from other plantings. Make sure sprinklers aren't watering the pavement too.

When soil is dry or compacted it won't absorb water quickly. If water puddles, stop watering for a while and then restart, so the water has time to soak in.

Water in the early morning or evening – if you water at mid-day, half of the water just evaporates.

Thank you for all you're doing to conserve water! Many of these practices save energy and protect the water quality of Puget Sound as well.

What You Do to Conserve Helps Salmon and the Environment too!

At home you can save water and money by fixing leaks. Did you know that a toilet that leaks one gallon a minute can cost you up to \$800 a month in water and sewer charges? For advice on finding and fixing leaks around your home, including toilet leaks, visit www.savingwater.org.

Stopping leaks in our water system is one way we work to conserve. Duvall supplied 161,962,196 gallons of drinking water in 2012, of which 9,801,792 gallons were classified as leakage. Our system-wide leakage rate has averaged five percent over the last three years, low compared with most other water utilities and well below the ten percent state standard.



Conserving Water is a Shared Value

Conserving water helps us provide water for people, salmon, other wildlife and future generations. Conserving water also helps you manage your water bills.

Much of the language in this report is required by the Environmental Protection Agency but we've done what we can to make it easier to understand and read. Let us know how we are doing.

Your Opinion Matters

Since 1970, fluoride has been added to SPU's water as a preventative against tooth decay. In response to a January 2011 proposed U.S. Department of Health and Human Services recommendation, SPU has lowered fluoride levels to 0.8 parts per million, the lowest level allowed by state law. This move was strongly supported by local health officials.

We've Reduced Fluoride Levels

Our Drinking Water Quality Reflects Our Investments

Seattle Public Utilities (SPU) provides many cities and water districts with water to supply their customers. Two surface water sources provide the majority of water for SPU’s system; the Cedar River and the South Fork Tolt River. Duvall purchases all of its water from SPU. The City only receives water from the *Tolt Water Supply*.

Since both watersheds are publicly owned, SPU is able to safeguard our watersheds through a comprehensive protection program. This program prohibits agricultural, industrial, and recreational activities in the watersheds, and no one is allowed to live there. This means that there is little opportunity for contaminants to enter the water. Even so, there is always some potential for natural sources of contamination.

In SPU’s surface water supplies, the potential sources of contamination include:

- Microbial contaminants, such as viruses, bacteria, and protozoa from wildlife;
- Inorganic contaminants, such as salts and metals, which are naturally occurring; and
- Organic contaminants, which result from chlorine combining with the naturally occurring organic matter.

SPU measures for potential contaminants that may impact human health, taste or appearance of your drinking water.

In general, drinking water sources (including tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground it dissolves naturally occurring minerals and can pick up substances resulting from the presence of animals or human activity.

To ensure that tap water provided by public water systems is safe to drink, the U.S. Environmental Protection Agency and the Washington State Board of Health prescribe regulations that limit the amount of certain contaminants. U.S. Food and Drug Administration and the Washington State Department of Agriculture regulations establish similar limits on bottled water.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. But the presence of contaminants does not necessarily indicate that water poses a health risk. For more information about contaminants and potential health effects call the EPA’s Safe Drinking Water Hotline, 800.426.4791.

Our Results

The results of monitoring in 2012 are shown in the adjacent table. These results are for parameters regulated by the federal and state agencies. For other water quality information please contact the Public Works Department. We can also send you a list of the more than 200 compounds for which we tested but did not find in our surface water supplies.

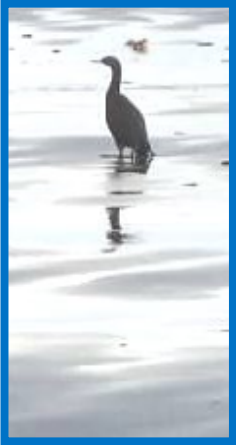
Water quality monitoring data can be difficult to interpret. To make all the information fit in one table, we used many acronyms that are defined below the table.

Other Information

Some people may be more vulnerable to contaminates in drinking water than the general population. Immune-compromised people such as people with cancer undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers or the Safe Drinking Water hotline, 800.426.4791 or website, <http://water.epa.gov/drink/hotline/>.



2012 Water Quality Monitoring Results: <i>This is what is in your tap water</i>						
Detected Compounds	Units	EPA’s Allowable Limits		Levels in Tolt Water		Typical Sources
		MCLG	MCL	Average	Range	
Raw Water						
Total Organic Carbon	ppm	NA	TT	1.2	1.1 to 1.4	Naturally present in the environment
Cryptosporidium*	#/100L	NA	NA	ND	ND	Naturally present in the environment
Finished Water						
Turbidity	NTU	NA	TT	0.06	0.04 to 0.38	Soil runoff
Barium	ppb	2000	2000	1.9	(one sample)	Erosion of natural deposits
Cadmium	ppb	5	5	0.35	(one sample)	Erosion of natural deposits
Fluoride	ppm	4	4	0.8	0.7 to 0.9	Water additive, which promotes strong teeth
Nitrate	ppm	10	10	0.13	(one sample)	Erosion of natural deposits
Total Trihalomethanes	ppb	NA	80	26.55	23.3 - 30.0	By-products of drinking water chlorination
Haloacetic Acids(5)	ppb	NA	60	23.6	17.5 - 29.6	By-products of drinking water chlorination
Chlorine	ppm	MRDLG =4	MRDL = 4	Average = 1.01 Range = 0.81 - 1.21		Water additive used to control microbes



Note:
**Cryptosporidium was not detected in any samples from the Cedar or Tolt (3 samples each supply).*

Definitions

MCLG: *Maximum Contaminant Level Goal* — The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

MCL: *Maximum Contaminant Level* — The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MRDL: *Maximum Residual Disinfectant Level* — The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG: *Maximum Residual Disinfectant Level Goal* — The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

TT: *Treatment Technique* — A required process intended to reduce the level of a contaminant in drinking water.

NTU: *Nephelometric Turbidity Unit* - Turbidity is a measure of how clear the water looks. The turbidity MCL that applied to the Cedar supply in 2012 is 5 NTU, and for the Tolt it was 0.3 NTU for at least 95% of the samples in a month. 100% of the samples from the Tolt in 2012 were below 0.3 NTU.

NA: *Not Applicable.*

ND: *Not Detected.*

ppm: *1 part per million = 1 mg/L = 1 milligram per liter.*

ppb: *1 part per billion = 1ug/L = 1 microgram per liter.*

1 ppm = 1000 ppb.

Lead and Copper Monitoring Results (Tolt WSA)					
Parameter and Units	MCLG	Action Level+	2011 Results*	Homes Exceeding Action Level	Source
Lead, ppb	0	15	6	0 of 53	Corrosion of household
Copper, ppm	1.3	1.3	0.16	0 of 53	plumbing systems
* 90th Percentile: i.e. 90 percent of the samples were less than the values shown.					
+ The concentration of a contaminant which, if exceeded, triggers treatment or other requirements					

Although there is no detectable lead in our source water, tests show there are sometimes elevated levels of lead and copper in some samples, primarily because of corrosion of household plumbing systems. These results show that it is very important that homeowners, business owners and others be aware of their type of plumbing, and how the plumbing affects their drinking water quality.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Duvall is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

